

# **Clustering Analysis with Python Project**

## **Project Deliverables**

You will be required to provide the following deliverables.

• A python notebook with your solution.

### Instructions

#### **Background Information**

Champagne Company is a leading wine company that specializes in the importation and distribution of premium and super-premium wines, champagnes, and spirits within the East African region. The main goal of the company is to make the most exclusive brands of wine more accessible at an affordable price. The company wants to satisfy the growing local demand for specialized products and the ever-increasing tourism industry where guests don't want to settle for less.

#### **Problem Statement**

Your task as a Data Scientist working for this company is to perform wine segmentation given the following dataset. The dataset is the result of a chemical analysis of wines grown in the same region in Kenya but derived from three different cultivars.

Upon modeling, you will be required to perform statistical analysis on the clusters highlighting key findings and making recommendations on business decisions based on your findings.

You will be required to go through the following stages:

- Define the Research Question
- Data Importation
- Data Exploration
- Data Cleaning
- Data Analysis (Univariate and Bivariate)
- Data Preparation
- Data Modeling

- Model Evaluation
- Recommendations / Conclusion
- Challenging your Solution

Study your data carefully before implementing your solution.

You can use the following guiding notebook [Link].

#### Dataset

• Dataset URL = <a href="https://bit.ly/2UBJERh">https://bit.ly/2UBJERh</a>

Project Source: <a href="https://bit.ly/3fg5SjQ">https://bit.ly/3fg5SjQ</a>